

# Datasheet

**RS Stock No: 281366**

## **Steel Black Self-Colour Hexagon Socket Button Head Screws: Metric Thread**



Button Head Socket Screws are designed for light duty. They have a similar thread design as a Socket Cap Screw although the dome-shaped head is wider and has a lower profile than a Socket Cap Screw, presenting an aesthetic appearance to an assembly. These fasteners are ideal when a wider bearing surface is required.

Self-colour steel is an uncoated mild steel and is used in applications where corrosion resistance is not required. If painted or suitably treated these self-colour button head socket screws can be used in outdoor applications.

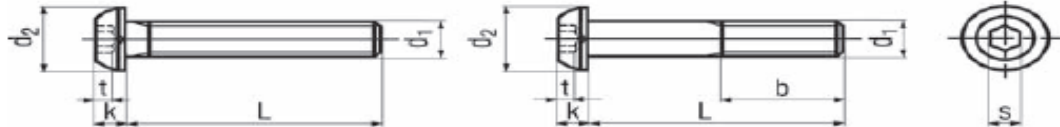
- Threaded in accordance with ISO 7380 standard
- 10.9 grade High Tensile Steel
- Used for applications with limited space in high tensile applications
- Suitable for light fastening applications in most food, facilities maintenance and electronic & domestic applications.
- Typical applications include; Machine tooling, Securing guards and covers, Securing ornamental, fixtures, plus many more engineering applications
- Requires a Hex key / Allen key



**ENGLISH**

Please view our full range listing below for all Steel Black Self-Colour Hexagon Socket Button Head Screws.

| <b>Head Shape</b> | <b>Material</b> | <b>Thread Size</b> | <b>Length</b> | <b>RS Part No.</b> |
|-------------------|-----------------|--------------------|---------------|--------------------|
| Hex Socket Cap    | Steel           | M3                 | 8 mm          | 281186             |
| Hex Socket Cap    | Steel           | M3                 | 10 mm         | 281192             |
| Hex Socket Cap    | Steel           | M3                 | 12 mm         | 281209             |
| Hex Socket Cap    | Steel           | M3                 | 5 mm          | 8229094            |
| Hex Socket Cap    | Steel           | M3                 | 6 mm          | 8229098            |
|                   |                 |                    |               |                    |
| Hex Socket Cap    | Steel           | M4                 | 8 mm          | 281215             |
| Hex Socket Cap    | Steel           | M4                 | 10 mm         | 281221             |
| Hex Socket Cap    | Steel           | M4                 | 12 mm         | 281237             |
| Hex Socket Cap    | Steel           | M4                 | 16 mm         | 281243             |
| Hex Socket Cap    | Steel           | M4                 | 25 mm         | 8229101            |
| Hex Socket Cap    | Steel           | M4                 | 20 mm         | 8229108            |
| Hex Socket Cap    | Steel           | M4                 | 6 mm          | 8229307            |
|                   |                 |                    |               |                    |
| Hex Socket Cap    | Steel           | M5                 | 10 mm         | 281259             |
| Hex Socket Cap    | Steel           | M5                 | 12 mm         | 281265             |
| Hex Socket Cap    | Steel           | M5                 | 16 mm         | 281271             |
| Hex Socket Cap    | Steel           | M5                 | 20 mm         | 281287             |
| Hex Socket Cap    | Steel           | M5                 | 6 mm          | 8229105            |
| Hex Socket Cap    | Steel           | M5                 | 8 mm          | 8229114            |



| Thread Size d1                  |              | M3    | M4   | M5    | M6    | M8    | M10   | M12   | M16    |
|---------------------------------|--------------|-------|------|-------|-------|-------|-------|-------|--------|
| Thread Pitch                    |              | 0.5   | 0.7  | 0.8   | 1     | 1.25  | 1.5   | 1.75  | 2      |
| ~ISO 7380 Head Dia. d2          | min.         | 5.4   | 7.24 | 9.14  | 10.07 | 13.57 | 17.07 | 20.48 | 27.48  |
|                                 | max.         | 5.7   | 7.60 | 9.50  | 10.50 | 14.00 | 17.50 | 21.00 | 28.00  |
| ANSI B 18.3.4M Head Dia. d2     | min.         | 5.4   | 7.24 | 9.14  | 10.07 | 13.57 | 17.07 | 20.48 | 27.48  |
|                                 | max.         | 5.7   | 7.60 | 9.50  | 10.50 | 14.00 | 17.50 | 21.00 | 28.00  |
| ~ISO 7380 Head Height k         | min.         | 1.40  | 1.95 | 2.50  | 3.00  | 4.10  | 5.20  | 6.24  | 8.44   |
|                                 | max.         | 1.65  | 2.20 | 2.75  | 3.30  | 4.40  | 5.50  | 6.60  | 8.80   |
| ANSI B 18.3.4M Head Height k    | min.         | 1.43  | 1.95 | 2.50  | 3.00  | 4.05  | 5.20  | 6.24  | 8.44   |
|                                 | max.         | 1.65  | 2.20 | 2.75  | 3.30  | 4.40  | 5.50  | 6.60  | 8.80   |
| ~ISO 7380 Key Size s            | Nominal Size | 2     | 2.5  | 3     | 4     | 5     | 6     | 8     | 10     |
|                                 | min.         | 2.020 | 2.52 | 3.020 | 4.020 | 5.020 | 6.020 | 8.025 | 10.025 |
|                                 | max.         | 2.045 | 2.56 | 3.071 | 4.084 | 5.084 | 6.095 | 8.115 | 10.115 |
| ANSI B 18.3.4M Key Size s       | Nominal Size | 2     | 2.5  | 3     | 4     | 5     | 6     | 8     | 10     |
|                                 | min.         | 2.020 | 2.52 | 3.020 | 4.020 | 5.020 | 6.020 | 8.025 | 10.025 |
|                                 | max.         | 2.045 | 2.56 | 3.071 | 4.084 | 5.084 | 6.095 | 8.115 | 10.115 |
| ~ISO 7380 Key Engagement t      | min.         | 1.04  | 1.3  | 1.56  | 2.08  | 2.60  | 3.12  | 4.16  | 5.20   |
| ANSI B 18.3.4M Key Engagement t | min.         | 1.04  | 1.3  | 1.56  | 2.08  | 2.60  | 3.12  | 4.16  | 5.20   |

| Nominal Length | ~ ISO 7380 |       | Length Tolerance |    |    |    |    |     |     |     | ANSI B 18.3.4.M |      |
|----------------|------------|-------|------------------|----|----|----|----|-----|-----|-----|-----------------|------|
|                | min        | max   | M3               | M4 | M5 | M6 | M8 | M10 | M12 | M16 | min             | max  |
| 6              | 5.76       | 6.24  |                  |    |    |    |    |     |     |     | 5.7             | 6.3  |
| 8              | 7.71       | 8.29  |                  |    |    |    |    |     |     |     | 7.7             | 8.3  |
| 10             | 9.71       | 10.29 |                  |    |    |    |    |     |     |     | 9.7             | 10.3 |
| 12             | 11.65      | 12.35 |                  |    |    |    |    |     |     |     | 11.7            | 12.3 |
| 16             | 15.65      | 16.35 |                  |    |    |    |    |     |     |     | 15.7            | 16.3 |
| 20             | 19.58      | 20.42 |                  |    |    |    |    |     |     |     | 19.5            | 20.5 |
| 25             | 24.58      | 25.42 |                  |    |    |    |    |     |     |     | 24.5            | 25.5 |
| 30             | 29.58      | 30.42 |                  |    |    |    |    |     |     |     | 29.5            | 30.5 |
| 35             | 34.5       | 35.5  |                  |    |    |    |    |     |     |     | 34.5            | 35.5 |
| 40             | 39.5       | 40.5  |                  |    |    |    |    |     |     |     | 39.5            | 40.5 |
| 45             | 44.5       | 45.5  |                  |    |    |    |    |     |     |     | 44.5            | 45.5 |
| 50             | 49.5       | 50.5  |                  |    |    |    |    |     |     |     | 49.5            | 50.5 |
| 55             | 54.4       | 55.6  |                  |    |    |    |    |     |     |     | 54.5            | 55.5 |
| 60             | 59.4       | 60.6  |                  |    |    |    |    |     |     |     | 59.5            | 60.5 |

Nominal Lengths above the stepped line Full Thread

Nominal Lengths below the stepped line, the thread length at the discretion of the manufacturer, may be between a minimum of 2d+12mm and a maximum which is within 2 P of the head.

|                |  |
|----------------|--|
| ~ISO 7380      | Neither standard is intended for high strength applications. The only purpose of having them produced in property class 10.9 or 12.9 is to increase the wear resistance of the socket drive. |
| ANSI B 18.3.4M |  |

|                  | ~ISO 7380     |                 | ANSI B 18.3.4M   |               |
|------------------|---------------|-----------------|------------------|---------------|
| Material         | Steel         | Stainless Steel | Material         | Steel         |
| Property Class   | 10.9          | A2 & A4         | Property Class   | 12.9          |
| Finish           | Furnace Black | Plain           | Finish           | Furnace Black |
| Thread Tolerance | 6g            | 6g              | Thread Tolerance | 4g6g          |

For More Detailed Information, Please Refer To Complete ISO Or ANSI Standard, Which Are The Governing Standards.